FLEXIPole

Technical Service Manual

1000PB00131 Issue 3





CONTENTS

| | GENERAL INFORMATION | |
|-----|---|----|
| 1.1 | Introduction | 3 |
| 1.2 | General Precautions | 3 |
| 1.3 | Service Contacts | 3 |
| 1.4 | Document History | 3 |
| | ELECTRICAL DIAGRAMS | |
| 2.1 | Link Cable Assy (1000EL00155) | 4 |
| 2.2 | FLEXIPole 2-Way Loom Assy (1000EL00156) | 4 |
| 2.3 | FLEXIPole 4-Way Loom Assy (1000EL00157) | 4 |
| | MECHANICAL ASSEMBLY DRAWINGS AND PARTS LISTS | |
| 3.1 | FLEXIPole Assy | 5 |
| 3.2 | FLEXIPole Assy Spare Parts Lists | 10 |
| | DISASSEMBLY, COMPONENT REPLACEMENT AND ASSEMBLY | |
| 4.1 | General Fitting & Removal Information | 11 |
| 4.2 | Fitting & Removal Instructions - Mains Outlet | 11 |
| 4.3 | Fitting & Removal Instructions - Mains Inlet | 11 |
| 4.4 | Fitting & Removal Instructions - Labels | 11 |



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GENERAL INFORMATION

1.1 Introduction

The IVAC® FLEXIPole is a fully featured accessory for use with the IVAC® 'P' Series Syringe Pumps (P1000, P2000, P3000, P4000, PCAM, P6000, P7000, TIVA, and TCI&TIVA).

Carefully study the directions for use prior to attempting any repairs or servicing, to ensure familiarity with this product.

As part of a policy of continuous improvement, product enhancements and changes are introduced from time to time.

1.2 GENERAL PRECAUTIONS

Please read the general Operating Precautions described in the Directions for Use carefully prior to using this



An explosion hazard exists if the product is used in the presence of flammable anaesthetics. Exercise care to locate the product away from any such hazardous sources.



An electrical shock hazard exists if the products casing is opened or removed. Refer all servicing to qualified service personnel.

If the product is dropped, subjected to excessive moisture, humidity or high temperature, or otherwise suspected to have been damaged, remove it from service for inspection by a qualified service engineer.

1.3 SERVICE CONTACTS

For service contact your local ALARIS Medical Systems Affiliate Office or Distributor.

ALARIS Medical Systems Service Centre Addresses:

| ALAK | is inedical systems. | Service | Centre Addresses. | | | | |
|---|----------------------------|--|----------------------------|---|------------------------|---|---------------------------|
| AE ALARIS Medical Systems Middle East Office, PO Box 5527, Dubai, United Arab Emirates. | | CN ALARIS Medical Systems, Shanghai Representative Office, Suite 9B, Century Ba-Shi Building, 398 Huai Hai Rd(M.), | | GB - Manufacturer's Address: ALARIS Medical UK Ltd, The Crescent, Jays Close, Basingstoke, Hampshire, RG22 4BS, | | NO ALARIS Medical Norway A/S Solbråveien 10 A, 1383 ASKER, Norge. | |
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| Fax: | , | China. | ai 200020, | Tel: | | Fax: | |
| rax. | (971) 4 28 22 914 | | (50) 0004 00044000 | | (44) 0800 389 6972 | rax. | (47) 66 98 76 01 |
| | | Tel: | (56) 8621-63844603 | Fax: | (44) 1256 388 411 | | |
| AU | | Tel: | (56) 8621-63844493 | | | NZ | |
| | Medical Australia Pty Ltd, | Fax: | (56) 8621-6384-4025 | HU | | | Medical NZ Ltd, |
| | ospect Highway, | | | | Medical Hungary | | 13 Highbrook Drive, |
| Seven Hi | lls, NSW 2147, | DE | | Döbrent | tei tér 1, | East Tai | maki, Auckland, |
| Australia. | | ALARIS | Medical Deutschland, GmbH, | H-1013 | Budapest, | New Ze | aland. |
| Tel: | (61) 2 9838 0255 | Pascalst | tr. 2, | Magyar. | | Tel: | (64) 9 273 3901 |
| Fax: | (61) 2 9674 4444 | 52499 B | aesweiler, | Tel: | (36) 14 88 0232 | Fax: | (64) 9 273 3098 |
| Fax: | (61) 2 9624 9030 | Deutsch | land. | Tel: | (36) 14 88 0233 | | , , |
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| | Medical Belgium B.V., | | (10) 2101 001 121 | IT | | | rbacken 4B, Box 452 |
| | Mentockplein 19, | ES | | | Medical Italia S.P.A. | | Sollentuna. |
| | ombeek - Bever, | | Medical Espãna, S.L., | Via Ticir | | Sverige | |
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| Tel: | (32) 2 267 38 99 | Edificio | | | , | Fax: | (46) 8 544 43 225 |
| | | | | Firenze, | | гах. | (40) 6 344 43 223 |
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| CA | | Tel: | (34) 91 657 20 31 | | | | Medical Systems, Inc. |
| | Medical Canada, Ltd, 235 | Fax: | (34) 91 657 20 42 | NL | | | Vateridge Circle, |
| Shields C | | | | | Medical Holland, B.V., | | go, CA 92121, |
| Markham | , | FR | | | npand "Hoefse Wing", | USA. | |
| Ontario L | .3R 8V2, | | Medical France, S.A., | Printerw | | Tel: | (1) 800 854 7128 |
| Canada. | | 95, rue l | Péreire, | 3821 AF | P Amersfoort, | Fax: | (1) 858 458 6179 |
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| | | | | | | | own 7405, South Africa. |
| | | | | | | Tel: | (27) (0) 860 597 572 |
| | | | | | | Tel: | (27) 21 510 7562 |
| | | | | | | - | (2.) 21 010 7002 |

DOCUMENT HISTORY

| Revision | CO Number | Date | Description of Change/Changed by: |
|----------|-----------|-------------|--|
| 1 | | Production | Production, LN |
| 2 | CO2276 | 30-Jan-2001 | Updated to current configuration, DJM |
| 3 | CO4716 | 28-Oct-2004 | Updated format and to current configuration, ICT |

Fax:

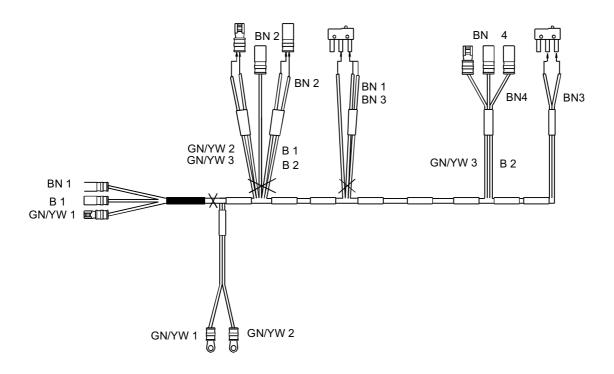
(27) 21 5107567

ELECTRICAL DIAGRAMS

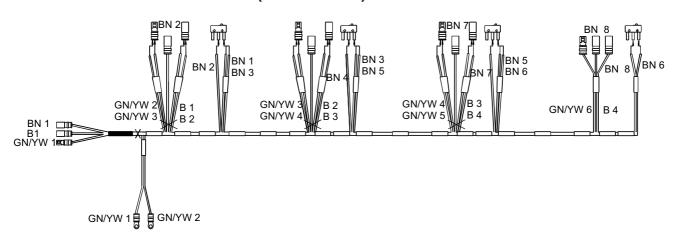
2.1 LINK CABLE ASSY (1000EL00155)



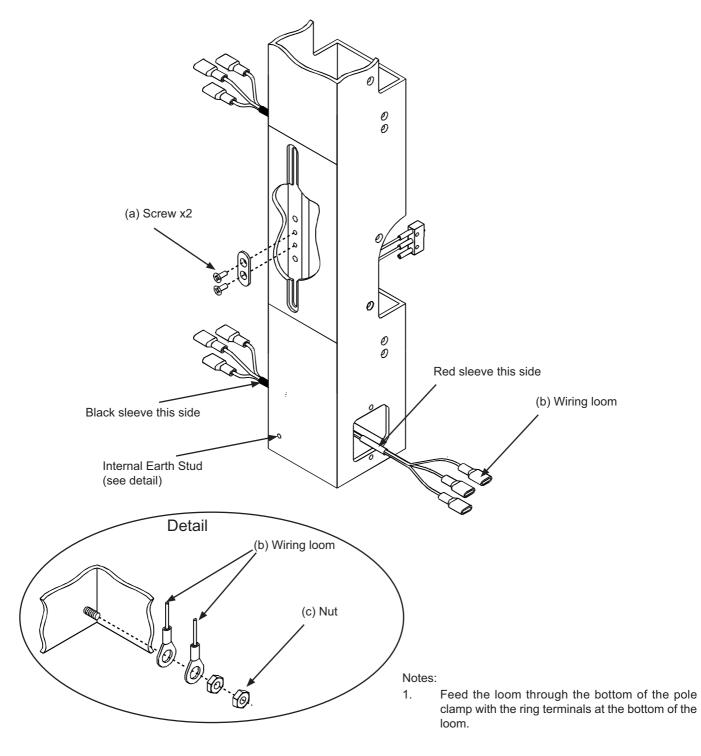
2.2 FLEXIPOLE 2-WAY LOOM ASSY (1000EL00156)



2.3 FLEXIPOLE 4-WAY LOOM ASSY (1000EL00157)

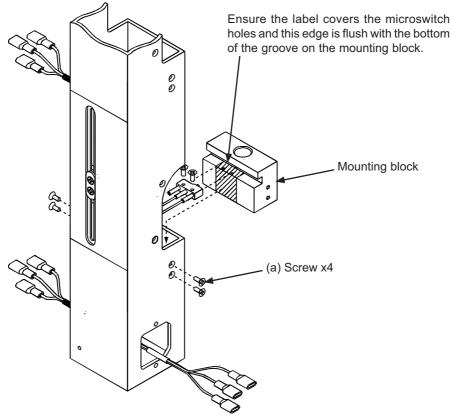


3.1 FLEXIPOLE Assy



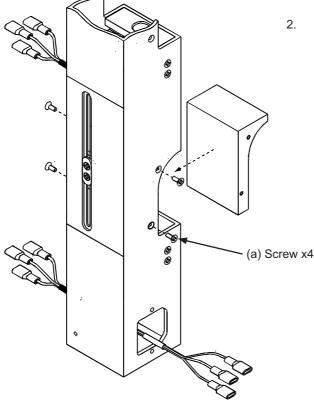
| Item | Part Number | Description |
|------|-------------|---------------------------|
| а | 0000ME00268 | Screw M3x8 csk hd posi ss |
| b | 1000EL00156 | Assy loom FlexiPole 2 way |
| | 1000EL00157 | Assy loom FlexiPole 4 way |
| С | 0000ME00292 | Nut M3 s/s |

3.1 FLEXIPOLE Assy (CONTINUED)



Notes:

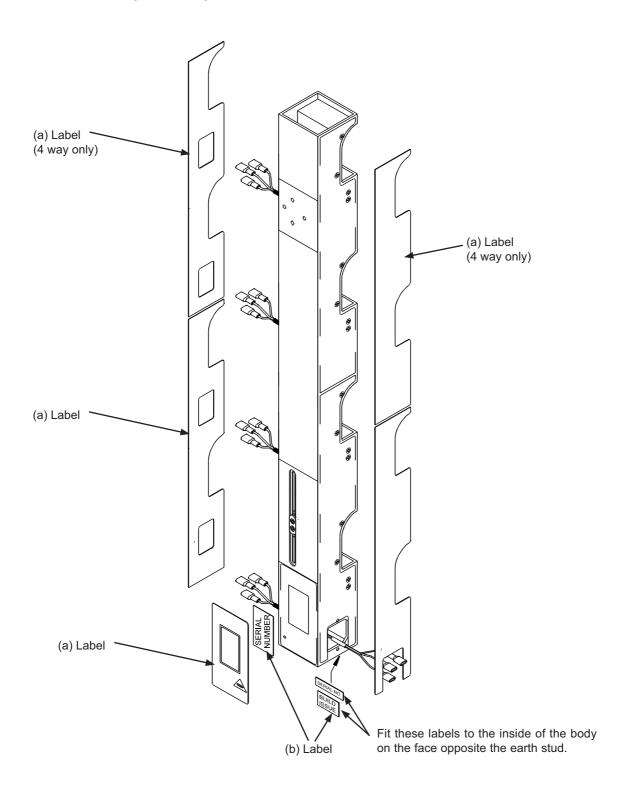
- 1. Clean the mounting block with ISO prior to fitting the label.
- When fitting the microswitch ensure the face with the white markings is against the mounting block edge. Also ensure the microswitch button is centralised in the mounting block hole.



Item a Part Number 0000ME00268

Description Screw M3x8 csk hd posi ss

3.1 FLEXIPOLE Assy (CONTINUED)

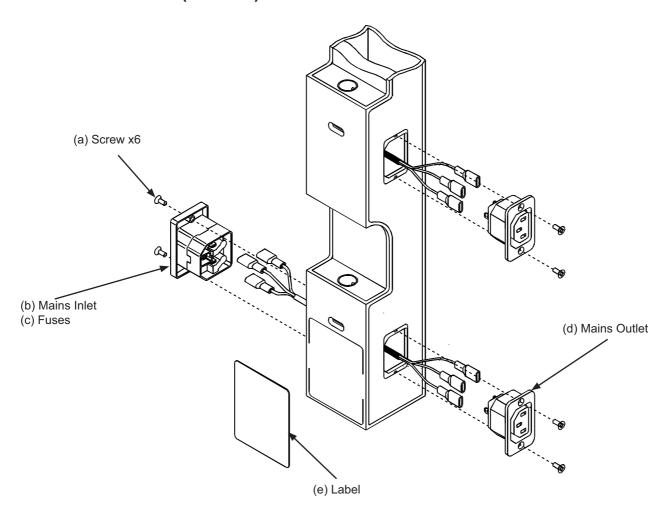


Notes:

1. Clean the body with ISO prior to fitting the labels.

| Item | Part Number | Description |
|------|-------------|---|
| а | 1000LB00343 | Label set Flexipole 2 way |
| | 1000LB00373 | Label set Flexipole 4 way |
| b | 1000LB00102 | Label combined serial number and status |

3.1 FLEXIPOLE Assys (CONTINUED)



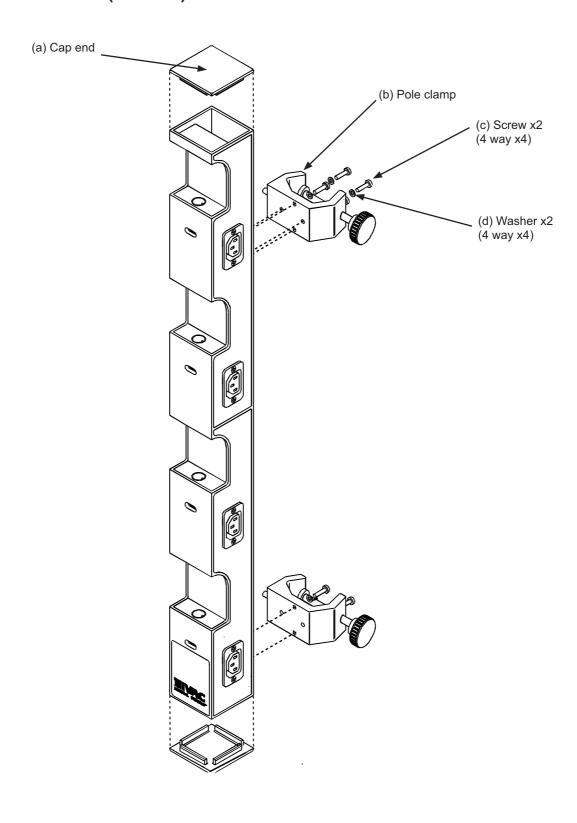
Notes:

- 1. Clean the area with ISO prior to fitting the label.
- 2. Ensure the correct fuses (2A 2 way & 3.15A 4 way) are fitted to the mains outlet.
- 3. Connect the loom crimps to the mains inlet & outlets prior to fitting:

 $\begin{array}{lll} \text{Blue -} & \text{Neutral (N)} \\ \text{Brown -} & \text{Live (L)} \\ \text{Earth/Yellow -} & \text{Earth (E)} \end{array}$

| Item | Part Number | Description |
|------|-------------|-----------------------------------|
| а | 0000ME00230 | Screw M3x8 csk hd pozi z+black |
| b | 0000EL00509 | Inlet mains iec panel/fuse holder |
| С | 0000EL00887 | Fuse 3.15A (4 way) |
| | 0000EL00888 | Fuse 2A (2 way) |
| d | 0000EL00508 | Outlet mains iec panel |
| е | 1000LB00343 | Label set Flexipole 2 way |
| | 1000LB00373 | Label set Flexipole 4 way |
| | | |

3.1 FLEXIPOLE ASSY (CONTINUED)



| Item | Part Number |
|------|-------------|
| а | 1000ME00190 |
| b | 1000SP00076 |
| С | 0000ME00227 |
| d | 0000ME00286 |

Description

Cap end multi-pump pole Assy pole clamp 40mm swaged Screw M4x16 pan hd posi 2 zp+p Washer M4 shakeproof

MECHANICAL ASSEMBLY DRAWINGS AND PART LISTS

3.2 FLEXIPOLE ASSY SPARE PARTS LIST

Component Material description 0000ME00292 NUT M3 S/S

 0000ME00268
 SCREW M3x8 CSK HD POSI SS

 0000ME00227
 SCREW M4x16 PAN HD POSI 2 ZP+P

0000ME00286 WASHER M4 SHAKEPROOF 1000EL00157 ASSY LOOM FLEXIPole 4 WAY

0000ME00230 SCREW M3x8 CSK HD POSI Z+BLACK

1000LB00373 LABEL SET FLEXIPole (4 way)

0000EL00887 FUSE 3.15A

0000EL00509 INLET MAINS IEC PANEL/FUSE HOLDER

1000ME00190 CAP END MULTI-PUMP POLE

1000LB00102 LABEL COMBINED SERIAL NUMBER & STATUS

1000EL00156 ASSY LOOM FLEXIPole 2 WAY 1000LB00343 LABEL SET FLEXIPole (2 way)

0000EL00888 FUSE 2A

0000EL00652 CABLE MAINS LINK FLEXIPole 0000EL00508 OUTLET MAINS IEC PANEL

1000SP00076 ASSY POLE CLAMP 40MM SWAGED

DISASSEMBLY, COMPONENT REPLACEMENT AND ASSEMBLY

4.1 GENERAL FITTING & REMOVAL INFORMATION

This instruction applies only to the IVAC® FLEXIPole.

Ensure the unit is disconnected from AC power supply and switched off before attempting to service the unit.

Ensure all the electrical safety tests are carried out as recommended below after any component fitting.

For additional technical assistance, contact your local ALARIS® Service Operations.

4.2 FITTING & REMOVAL INSTRUCTIONS - MAINS OUTLET

- Remove the two M3X8 (0000ME00230) csk hd posi black screws.
- ◆ Remove the mains outlet (0000ME00508), next pull the crimps off that are connected to the mains outlet.

Wiring Brown - Live
Blue - Neutral
Green/Yellow - Earth

- Replace the mains outlet with the new one and refit the crimps onto the new outlet.
- Once the new outlet has been fitted carefully replace the wiring and push the mains outlet back into position.
- ◆ Fit the two M3X8 (0000ME00230) securing the mains outlet. Repeat to the other mains outlet if required.
- Perform the electrical safety test described in this section.

4.3 FITTING & REMOVAL INSTRUCTIONS - MAINS INLET

- Remove the two M3X8 (0000ME00230) csk hd posi black screws.
- Remove the mains inlet (0000ME00509), next pull the crimps off that are connected to the mains inlet.

Wiring Brown - Live
Blue - Neutral
Green/Yellow - Earth

- Replace the mains outlet with the new one and refit the crimps onto the new inlet.
- Once the new inlet has been fitted carefully replace the wiring and push the mains outlet back into position.
- Fit the two M3X8 (0000ME00230) securing the mains inlet.
- Perform the electrical safety test described in this section.

4.4 FITTING & REMOVAL INSTRUCTIONS - LABELS

- Carefully remove the mains inlets and mains outlet
- Using a sharp edge (eg a scalpel). Carefully lift one corner of the panel taking care not to damage the surface.
- Peel the panel away, Pull or rub off any adhesive residual and then degrease the side with isopropyl alcohol. Ensure that the solvent does not enter the casing and get on the wiring.
- ◆ Fit the new labels making sure that the surface stays clean.
- Refit the mains inlets and mains outlets taking care to ensure the wiring follows the coding below.

Wiring Brown - Live
Blue - Neutral
Green/Yellow - Earth

- Once the inlets/outlets have been fitted carefully replace the wiring and push the mains outlet back into position.
- Refit the fixing screws to secure the inlets/outlets.
- Perform the electrical safety test described in this section.